

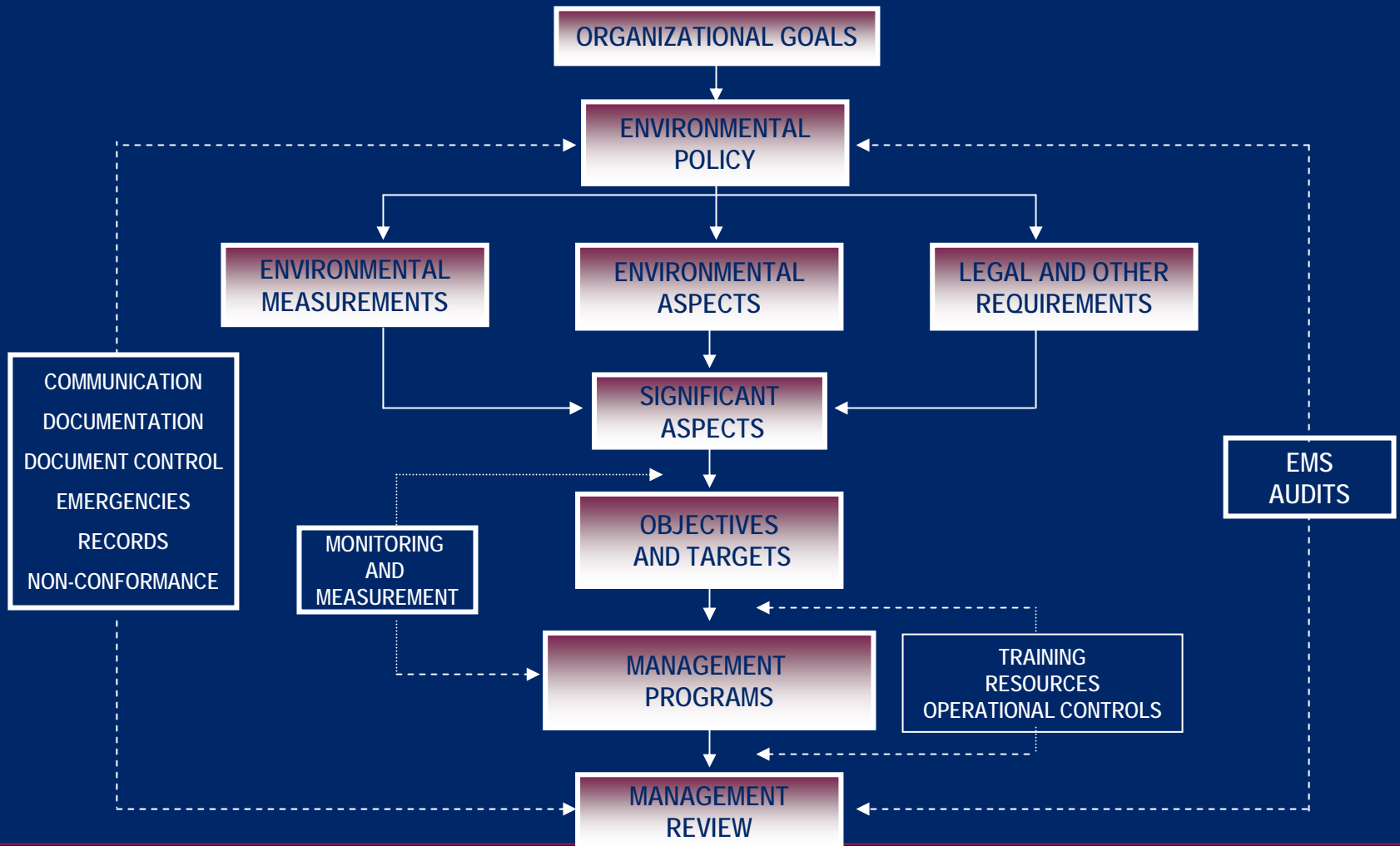


EMS Implementation

FAA Environmental Forum

May 17, 2006

EMS Framework



Two parts of an EMS

EMS "Whats"

- Establish Policy
- Identify Env. aspects
- Identify requirements
- Set objectives and targets
- Implement programs
- Start operational controls
- Communicate
- Monitor and measure
- Audit EMS
- Management reviews

EMS "Hows"

- Aspects procedure
- Requirements procedure
- O&T procedure
- EMP procedure
- OCs procedure
- Communications procedures
- M&M procedure
- EMS audit procedure
- Mng't. Review procedure

To Start: What is the Scope of the EMS?

- ISO-14001 structured primarily for fence-line organizations
- Now being applied to headquarters, policy orgs
- Being integrated with Quality and H&S. Also with Security and soon with Social Responsibility (SR)
- There is a relationship between your EMS scope and your organizational scope (inconvenient parts must be included)
- Major considerations: 1. How to include tenants, getting them to play ball, coordinating at the interfaces
2. Supply chain, product stewardship

Look at Existing Programs (EMPs)

- They constitute the existing base to start from
- They already address known significant risks
- They include existing operational controls
- They may specify roles and responsibilities
- They may include O&Ts and performance indicators
- They may include the activities, products, services

New activities, products and services?

- Which other activities, products and services need to be added (have aspects)?
 - Consider mission
 - Consider activities that support the mission (e.g., maintenance)
 - Consider activities that are regulated and those not regulated (e.g., recycling, water use)

Identify the Aspects and Impacts

- Identify the aspects and potential impacts of the added activities, products and services
- Create and apply significance criteria to old and new
- If significant aspect already exists, just add the new activities, products and services to its list
- If not, add the new significant aspect to the list of significant aspects

Identify new or modified requirements

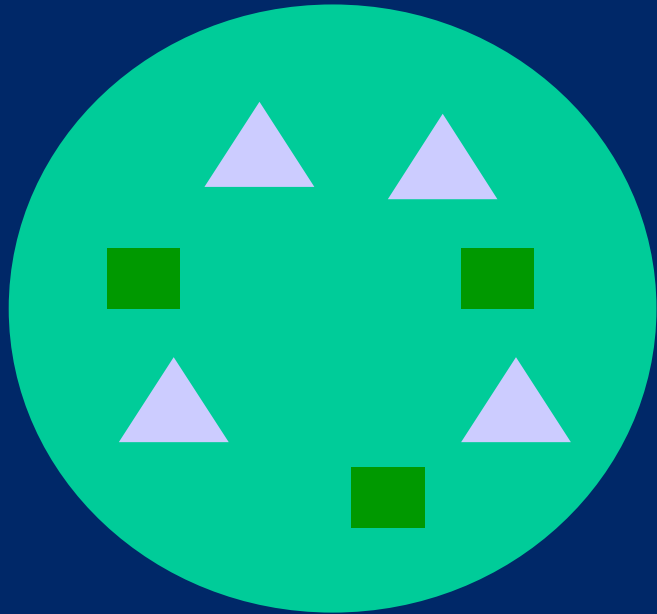
- Update legal and other requirements
- Set new or modified objectives and targets and specify performance indicators
- Determine new (or modifications to) operational controls

Create EMPs

- Create new EMPs for new Aspects
- Standardize existing programs into EMPs
- Use the EMP Template to establish consistency and predictability
- Determine roles and responsibilities for operational personnel and environmental staff

Old and new EMPs

Organization



▲ Old EMPs address existing risks identified by **regulatory** requirements

■ New EMPs address new risks identified by **significance of risk** criteria

EMP Template

EMP FOR SIGNIFICANT ENVIRONMENTAL ASPECT

1. Objective:

2. Target:

3. Reasons or Significance:

4. Potential Impact:

5. Legal and Other Requirements:

6. Performance Indicators:

7. Program Description:

EMP (Con'd)

8. Operational Control:

9. Budget resources:

10. Structure, Authorities, Responsibilities:

Tasks:	Responsible Person:
--------	---------------------

11. Records:

12. Documents:

13. Competence of Responsible Persons:

14. Other program Elements:

Document the EMS procedures

- The EMS achieves consistency and reliability through procedures
- Procedures should be documented
- There will be at least 14 EMS Procedures
- They can be created after development of the system elements (more experience and knowledge)
- They should be followed to keep EMS updated and working

Communicate and Train

- Communicate roles, responsibilities, accountabilities to relevant personnel and staff
- Ensure operational controls are implemented
- Inform as appropriate on procedures, programs and controls
- Communicate progress, achievements, challenges broadly across organization – begin culture change
- Do awareness and competency training often

Conduct EMS Audit

- Create Audit Program
- Train team of internal auditors
- Conduct EMS Audit a few months after implementation (e.g., 2 to 6)
- Follow procedures and audit criteria to evaluate root causes of system weaknesses
- Prepare findings and corrective action requests
- Ensure audit closure

Conduct the Management Review

The EMS Coordinator provides for review:

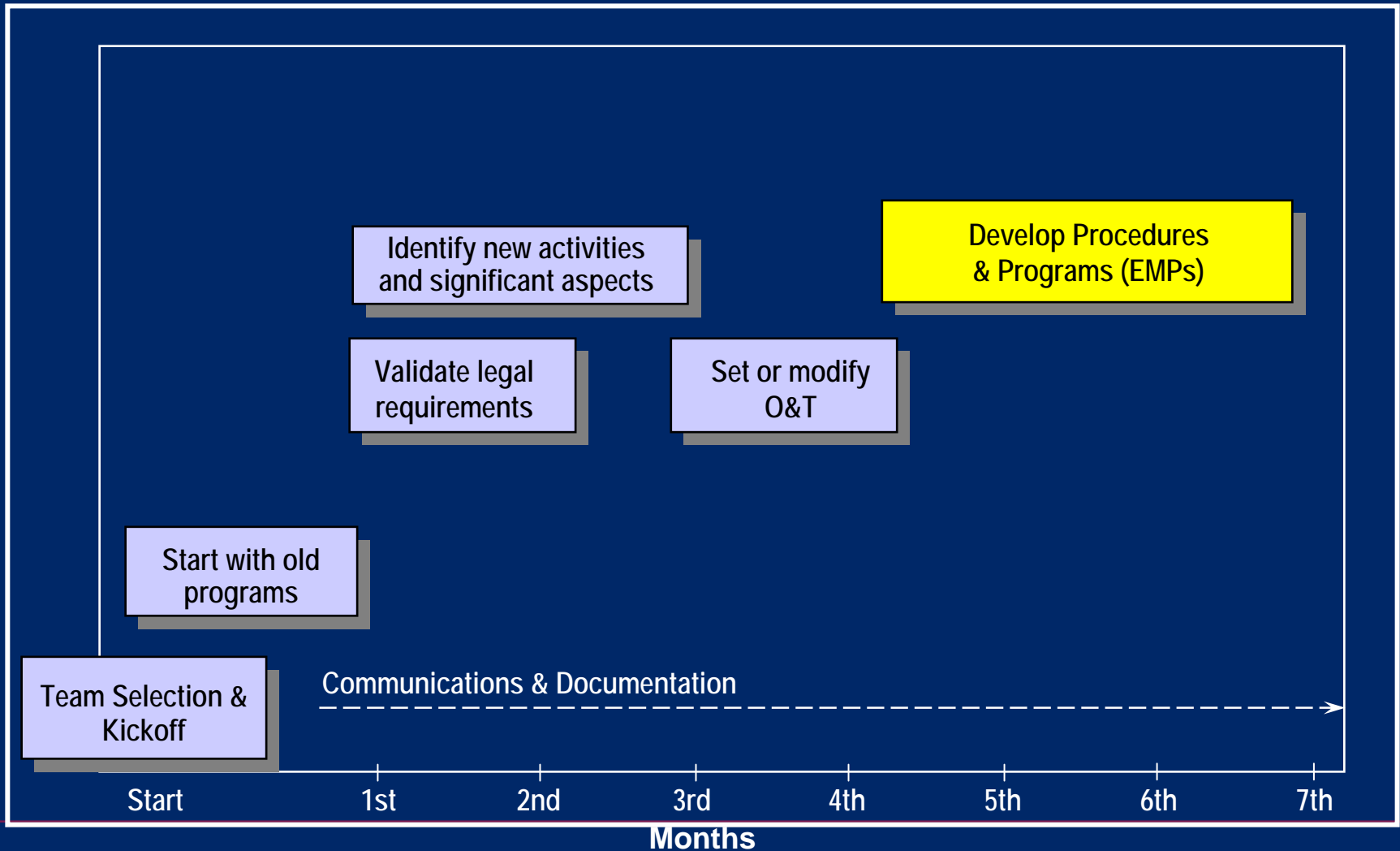
- Internal EMS audit results
- Communications from external interested parties, including complaints
- Environmental performance of the organization
- Progress towards achievement of objectives and targets
- Regulatory compliance status
- Status of corrective and preventive actions
- Follow-up actions from previous audits
- Changing circumstances, new legal or other requirements
- Recommendations for improvement

Follow-through on management decisions and recommendations

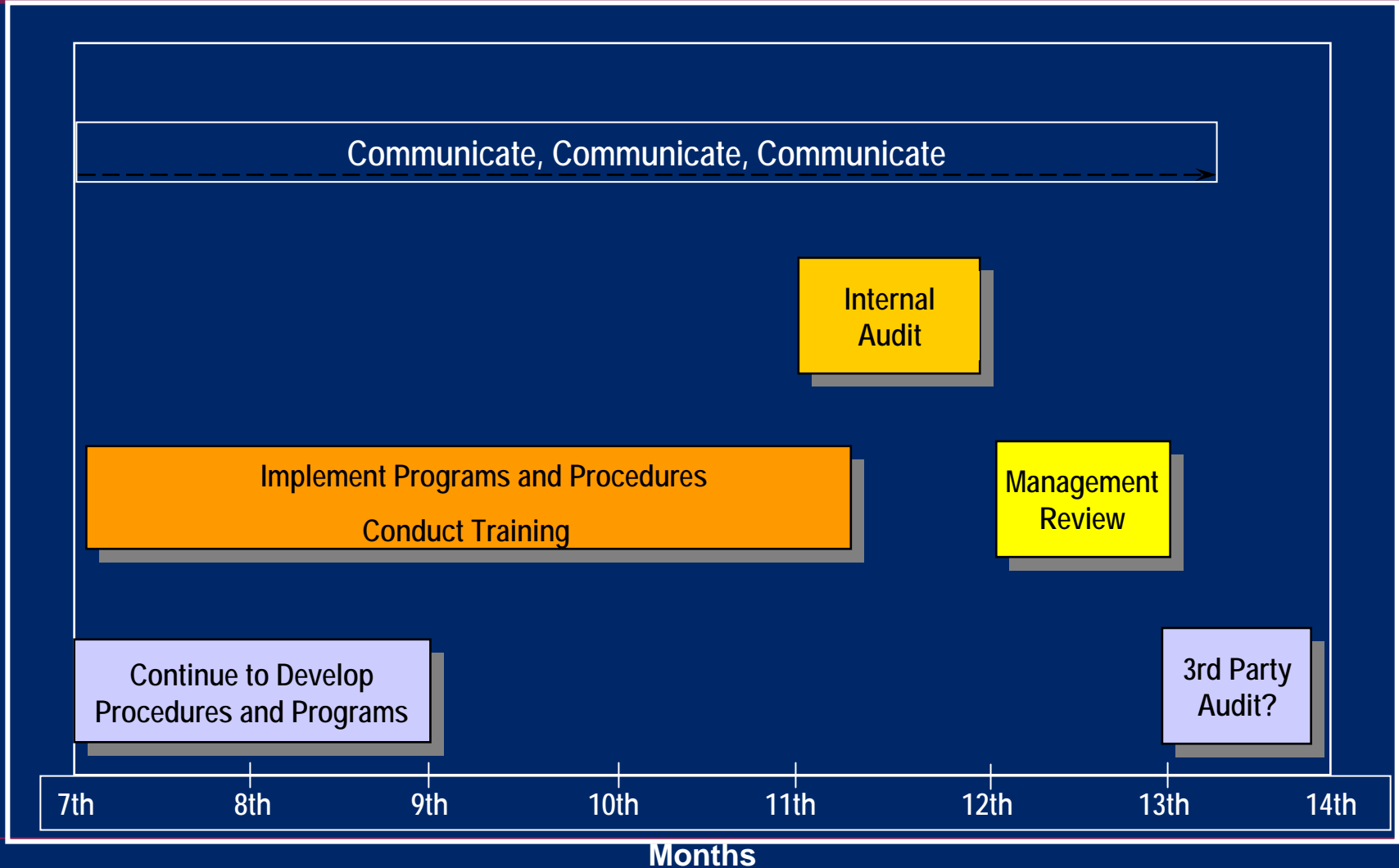
Resource requirements

- Procedures: 2 days each to develop
- Programs: 3 days each to develop
- Training:
 - Awareness: ½ day for all personnel
 - Competency: 1 day for those that need it

Implementation timeline



Implementation timeline (con'd)



1. Implementation lessons

- Start with the base you already have (e.g., programs)
- Find incremental activities and aspects
- Apply significance criteria uniformly to all aspects
- Use EMP template to standardize approach/ data
- Do competency training where required only
- Do as much awareness training as possible

2. Implementation lessons

- There will be gaps, so use what you already have
- Management usually wants to stay away
- Environmental staff normally wants to do it all
- Creating the EMS can lead to immediate benefits
- Remind all of goal and benefits of the EMS
- Communicate often to relevant parties